

amputation in all such cases when taking place in the middle and lower third of the thigh, and hesitating only in a like recommendation in cases of fracture of the upper third, on account of the extreme mortality of such amputations. Malgaigne's and Bauden's experience was then quoted to prove the poor success of conservative treatment in these injuries, the latter surgeon saving only 2 out of 25 cases, and these two retained useless and deformed limbs. The author then went on to say that the experience of civil surgeons was not unlike that of their military brethren, although it was much more limited; and expressed an opinion, which he believed to be generally entertained, that a satisfactory result can rarely be obtained by conservative treatment, except in the most favourable cases—that is, when the subjects are young and the fracture uncomplicated; when the soft parts are not materially damaged nor the bone comminuted. When the bone was comminuted and the soft parts seriously involved (such a condition being generally produced by local mechanical violence), he believed that a satisfactory termination of the case must be regarded with doubt. If the patient should be old or unhealthy, amputation should be at once performed; and if there should be a doubt as to which line of treatment to adopt, the safest is to decide on amputation. But if the subject should be a young and healthy one, and not subjected to injurious hygienic influences, the author believed that a satisfactory termination might be obtained by removing at once the broken and disconnected fragments of bone (enlarging the wound if necessary), and by maintaining the absolute repose which is so essential. He stated that he believed it to be bad practice to leave the broken fragments in position, with the hope of union; and that by doing so we left a constant source of irritation, which must retard the local process of repair, as well as seriously weaken the powers of the patient, a subsequent operation being almost necessarily required to remove what will become necrosed bone.—*Med. Times and Gaz.*, Feb. 23, 1861.

29. *Complicated Fracture of the Leg, followed by the Formation of a False Articulation; Cure effected by the use of a Seton.*—M. JOBERT DE LAMBALLE, at a late meeting of the Imperial Academy of Sciences, narrated the following case, which is of some value in both its physiological and pathological relations:—

A gentleman, forty-two years of age, was thrown from his carriage on the 30th of June. A severe direct fracture of the right leg was the result of this accident. Various applications were employed, including plaster, and starch bandages, but at the close of about three months it was ascertained that union of the ends of the fracture had not taken place. For two months subsequently the limb was put in an ingenious apparatus devised by M. Sention, which admitted of free motion of the limb whilst the fracture was kept immovable, an opening being left in front, so as to allow of its being easily painted with tincture of iodine.

At the expiration of this period no change had occurred in the condition of the patient, and he was desirous of submitting to an operation with a view to recovering the lost functions of the limb. A seton was accordingly introduced between the opposed ends of the fracture, the thread being brought into contact with the periosteum without touching the bony extremities; it was kept in position for ten days, and the suppuration became exhausted six days after its removal.

This operation was performed on the 17th of January; on the 12th of February the mobility between the fragments had become obscured, and at the end of the same month there was no longer any trace of it; and the patient was soon after able to walk.

Evidently, there was no exfoliation and no necrosis, in consequence of the application of the seton, so that the callus must have been necessarily formed under the influence of the excitation of the periosteum, an evident source, in similar circumstances, of all bony cicatrization, as has been demonstrated by M. FLOURENS.

The question is, consequently, not concerning a secondary callus resulting from the formation of granulations occurring after a superficial necrosis of the fragments, but rather of a cicatrix which has for its origin the deposit of a pro-

duct furnished by the enveloping membrane of the bones upon which has devolved the property of reproducing and regenerating them.

The duration of treatment was very different from, being much shorter than, that of patients in whom M. Jobert applied the seton by placing it next the surfaces of the extremities of the fragments, and this will be readily understood if we take into consideration the fact that the periosteum alone furnished the means of cicatrization, whilst in the other cases there were necrosis and granulation of the ends of the bone.—*London Med. Review*, Sept., 1860.

30. *Digital Compression in Aneurism*.—M. MIRAULT, of Angers, related to the Paris Surgical Society the following two cases of aneurism, in which digital compression had been successfully employed:—

1. A man, aged 23, exhibited an aneurismal tumour at the bend of the arm, some time after being bled. When admitted into the hospital this tumour was about the size of half an egg. Digital compression was made on the brachial artery, at about the middle of its course, from 11 o'clock A. M. to 9 P. M., and next day it was resumed from 6 A. M. to 9 P. M. The tumour became more firm, and the compression was employed again at 6 A. M. of the third day; at 8 the pulsations had become indistinct, and at 12 they had completely disappeared. Thirty-one hours altogether had been occupied in making compression.

2. A child, aged 9, having had the trunk of the temporal artery opened, just anterior to the ear, an aneurism about the size of a nut appeared eight or ten days after the accident. Direct digital compression was employed for five hours on the first day; for ten and a half hours on the second; for eleven hours on the third; for nine and a half hours on the fourth; for eleven hours on the fifth; for ten hours on the sixth; for ten and a half hours on the seventh; and for nine and a half hours on the eighth—making a total of eighty-five hours, at the end of which time the aneurism had become cured.—*Med. Times and Gaz.*, Jan. 19, 1861, from *L'Union Méd.*, No. 1, 1861.

31. *Arrest of Venous Hemorrhage*.—In the course of an interesting paper by Prof. LANGENBECK on the "Surgical Pathology of Veins," illustrated by numerous cases, he observes that styptics are not suitable for the arrest of venous hemorrhage. The best of these, the liquor ferri sesquichlorati, is dangerous, owing to the extensive thrombus formations and subsequent irritating effects it gives rise to. In all cases, when obstinate venous bleeding proceeds from several small veins, he gives decided preference to the actual cautery, as most certainly guarding against the breaking up of thrombi and pyæmia. When the bleeding proceeds from a large vessel, compression, ligature of the vein, or ligature of the corresponding artery, should be resorted to. In wounds of the large veins of the extremities, *compression* of the peripheric end by means of the finger will usually suffice; and in wounds of the jugulars, we should at once apply the finger to the central end to prevent the entrance of air, and then to the peripheric end to arrest the bleeding. In the case of a large wound of the jugular, the finger can only act provisionally, and the best means of proceeding consists in closing the lips of the outward wound by strips of plaster (which must not extend to the uninjured side of the neck, where they would compress the opposite jugular), so applied as to exert the most equable compression around the wound without impeding the circulation. In the case of the veins of the extremities, bandages may also be exactly applied, commencing at the toes or fingers. When the injured vein is at the bottom of a wound, the author places some cerated linen in contact with it, fills the wound with charpie, and then brings its edges together with plaster.

*Ligature of the Vein*.—In general, tying the peripheric end of a wounded vein of the extremities suffices; but a ligature both above and below the wound may be required when a considerable branch enters just above the central end. To avoid the loss of blood during the removal of large tumours, the provisional ligature of several large subcutaneous veins, which sometimes acquire the size of the finger, may be requisite; and in such cases the author always applies a double ligature, and divides the vein between, removing the ligatures after the